Virginia Title V Operating Permit

This permit is based upon the requirements of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Permit Number	Effective Date	Expiration Date
SWRO10332	June 29, 2005	June 28, 2010

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Webb Furniture Enterprises, Inc.
P.O. Box 1277
Galax, VA 24333
Registration No. 10332
County-Plant No. 640-0036

located at

Plant #1
307 South Railroad Avenue
Galax, VA 24333

in accordance with the Conditions of this permit.

Approved on June 29, 2005.

Robert G. Burnley
Director

Permit consists of 26 pages.
Permit Conditions 1 to 90
Source Testing Report Format

PERMIT CONDITIONS - the regulatory reference and authority for each condition is listed in parentheses ( ) after each condition.

1. The permitted facility is to be operated in accordance with the terms of this permit. You are also advised that the conditions of the Department's permits dated April 17, 1980 and March 22, 1999 (as amended June 19, 2000 and January 6, 2005), are still valid. The 4/17/80 and 3/22/99 NSR permits are consolidated in the 6/19/2000 and 1/6/2005 amended NSR permits. This permit is subject to revocation prior to its expiration date if the permittee fails to comply with the terms and conditions of the permit, any applicable federal or state requirements as defined in 9 VAC 5 Chapter 80 Article 1 or any provisions of 9 VAC 5 Chapter 80 Article 1. Any physical change in, or change in the method of operation of, the stationary source subject to this permit may be subject to 9 VAC 5 Chapter 80 Article 6, 9 VAC 5-80-1790, 9 VAC 5-80-30, or 9 VAC 5-80-50 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-260 and 9 VAC 5-80-190)

   Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:

   a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or modification of a source, where there is, or there is the potential of, a resulting emissions increase;
   b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
   c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, unless such an increase is authorized by an emission cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
   d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
   e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
   f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
   g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and by 9 VAC 5-80-720 B. and C. If there is any change made at the permitted facility which requires a new permit or a permit modification under 9 VAC 5 Chapter 80 Article 6, 9 VAC 5-80-1790, 9 VAC 5-80-30, it may be necessary to reopen this permit under 9 VAC 5-80-110 to ensure that applicable requirements continue to be met.

   (9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

2. Equipment to be operated consists of:

Emission Unit ID	Emission Unit Description	Capacity/ Size	Pollution Control Device (PCD)	PCD ID	Applicable Permit Date
Fuel Burning Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
B1-A	Bigelow wood-fired boiler	39,200,000 Btu/hr	Barron multicyclone	Bm-1	1/6/2005
Fuel Burning Equipment Subject to 9 VAC 5 Chapter 50 (New or Modified)					
B-1B, B-1C	Bigelow woodwaste/coal-firing (secondary fuels)	39,200,000 Btu/hr	Barron multicyclone	Bm-1	1/6/2005
B-2	Wickes distillate oil-fired boiler	17,250,000 Btu/hr	None		1/6/2005
Woodworking Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
WO(bh-1) (bh-2) (bh-3)	Woodworking (Rough end and Rough machine for wood Furniture parts)	66,000 bd. ft./day total for all wood-working operations	Moldow baghouses (vent internally)	Df-1 Df-2 Df-3	N/A
WO(bh-4) (bh-5)	Woodworking (Machine room and sand room for wood furniture parts)		Carter-Day bag-houses (124RF10 and 376RF10)	Df-4 Df-5	N/A
WO(bh-6)	Small woodworking equipment		Torit-Day baghouse (156RF10)	Df-6	N/A

Emission Unit ID	Emission Unit Description	Capacity/ Size	Pollution Control Device (PCD)	PCD ID	Applicable Permit Date
Woodworking Equipment Subject to 9 VAC 5 Chapter 50 (New or Modified)					
WO(bh-7) (bh-8)	Woodworking (Two CNC routers)		Donaldson and Torit 72RF10 Baghouses	Df-7 Df-8	1/6/2005
Furniture Finishing Equipment Subject to 9 VAC 5 Chapter 50 (New or Modified)					
FR(sb-1) FR(sb-2)	Dry filter back spray booth Dry filter back spray booth	33,250 acfm 28,876 acfm	Filter Filter	Sf-1 Sf-2	1/6/2005 1/6/2005
FR(sb-3) FR(sb-4) FR(sb-5)	Dry filter back spray booth Dry filter back spray booth Dry filter back spray booth	28,876 acfm 33,250 acfm 35,500 acfm	Filter Filter Filter	Sf-3 Sf-4 Sf-5	1/6/2005 1/6/2005 1/6/2005
FR(sb-6) FR(sb-7) FR(sb-8)	Dry filter back spray booth Dry filter back spray booth Dry filter back spray booth	36,000 acfm 28,876 acfm 24,500 acfm	Filter Filter Filter	Sf-6 Sf-7 Sf-8	1/6/2005 1/6/2005 1/6/2005
FR(sb-9) FR(sb-10) FR(sb-11) FR(sb-12)	Dry filter back spray booth Dry filter back spray booth Dry filter back spray booth Dry filter back spray booth	28,876 acfm 28,876 acfm 37,626 acfm 13,125 acfm	Filter Filter Filter Filter	Sf-9 Sf-10 Sf-11 Sf-12	1/6/2005 1/6/2005 1/6/2005 1/6/2005
FR(ov-1) FR(ov-2) FR(ov-3)	Oven Oven Oven	1500 acfm 3000 acfm 3000 acfm	None None None		1/6/2005 1/6/2005 1/6/2005
FR(ov-4) FR(ov-5) FR(ft-1)	Oven Oven Flash Tunnel	3000 acfm 4500 acfm 14,000 acfm	None None None		1/6/2005 1/6/2005 1/6/2005
FR(rc-1) FR(pr-1) FR(vc-1)	Reverse roll coater, single roll Printer, enclosed vacuum coater and drying oven (all aqueous)	0.25 gph 1.0 gph 1.7 gph	None		1/6/2005
Wood Drying Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
LD(dk-1) (dk-2)	Lumber drying (hard/softwood) Coe Manufacturing	46,800 bd. ft. x 2 6,832,800 bd ft/yr	None		N/A
LD(dk-3)	Lumber drying (hard/softwood) Southeastern Installation, Inc.	90,000 bd. ft. 6,570,000 bd ft/yr	None		N/A
LD(dk-4)	Lumber drying (hard/softwood) Southeastern Installation, Inc.	54,200 bd. ft. 3,956,600 bd ft/yr	None		N/A
Furniture Gluing Equipment Subject to 9 VAC 5 Chapter 40 (Existing)					
GO	Gluing Operation	25,030 ft^2/hr total	None		N/A

The following emission units at the facility are identified in the application as being subject to 9 VAC 5-40-80 (visible emissions), 9 VAC 5-40-260 (particulate process weight rate table) or 9 VAC 5-40-280 B (sulfur dioxide emissions from combustion installations), and are listed as insignificant emission units in 9 VAC 5-80-720 B:

Emission Unit ID	Emission Unit Description	Capacity/ Size	Applicable Requirement **
Insignificant equipment or activities		9 VAC 5-80-720 A and 9 VAC 5-80-720 B:	
DG-1	Degreasing/Parts Cleaning	3.31 ft^2 parts washer	9 VAC 5-80-720 B, 9 VAC 5-40-80 and 5-40-260
FP-1	Diesel Engine for Emergency Fire Pump	960,000 Btu/hr heat input	9 VAC 5-80-720 A and 9 VAC 5-40-80

** Applicable requirements:
9 VAC 5-40-80 (visible emissions)
9 VAC 5-40-260 (particulate process weight rate table)
9 VAC 5-80-720 A (listed insignificant activity) and 9 VAC 5-80-720 B (insignificant due to emission levels)

These emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. However, one or more of the emission units identified above shall be subject to monitoring, recordkeeping, and reporting requirements pursuant to 9 VAC 5-80-110 if, in the Director's determination, operation of the emission unit(s) indicates a failure to comply with 9 VAC 5-40-80 or 9 VAC 5-40-260. The Director shall permit revision proceedings in accordance with 9 VAC 5-80-190 through 9 VAC 5-80-240, as appropriate, to impose specific permit conditions upon such noncomplying emission unit(s). (9 VAC 5-80-720 A & B, 9 VAC 5-40-80, 9 VAC 5-40-260, 9 VAC 5-80-110, and 9 VAC 5 Chapter 80 Article 4).

Fuel Burning Conditions

3. Particulate emissions from the Bigelow boiler (B-1) shall be controlled by a Barron Industries 30 tube BASE III 9K15-0606 ST Type B multicyclone, or equivalent, with a rated control efficiency of 87 percent. The multicyclone shall be provided with adequate access for inspection. An annual inspection shall be conducted on the multicyclone by the permittee to insure structural integrity. (9 VAC 5-80-110 C, 9 VAC 5-80-10 H, 9 VAC 5-50-260 and condition 19 of NSR permit issued 4/17/80 (as amended 6/19/2000 and 1/6/2005))

4. The approved fuels for the Bigelow wood-fired boiler (B-1) are wood and coal, including wood waste materials generated from the manufacturing processes of sources with SIC 2511. The permitted facility may switch from one of these approved fuels to another approved fuel without notification. A change to a fuel not listed above may require a permit modification.
(9 VAC-5-80-10 and 9 VAC 5-80-110 B and condition 18 of NSR permit issued 4/17/80 (as amended 6/19/2000 and 1/6/2005))

5. The approved fuel for the Wickes oil-fired boiler is distillate fuel oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change to a fuel not listed above may require a permit modification.
(9 VAC-5-80-10 and 9 VAC 5-80-110 B, 40 CFR 60.41c and condition 13 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

6. The Wickes oil-fired boiler (B-2) shall consume no more than 600,000 gallons per year of distillate oil, calculated as the sum of each consecutive 12 month period. Except as specified in this permit, the Wickes boiler is to be operated in compliance with Federal emissions requirements under 40 CFR 60, Subpart Dc.
(9 VAC 5-170-160, 9 VAC 5-80-110 A and 9 VAC 5-80-110 B and conditions 12 and 17 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

7. Emissions from the operation of the Bigelow wood/coal-fired boiler (B-1) shall not exceed the limits specified below:

Particulate Matter	12.7 lbs/hr	53.0 tons/yr
Sulfur Dioxide	34.2 lbs/hr	143.6 tons/yr
Nitrogen Oxides (as NO_2)	22.5 lbs/hr	94.5 tons/yr
Volatile Organic Compounds	1.5 lbs/hr	6.3 tons/yr

(9 VAC 5-50-260, 9 VAC 5-50-180 and condition 20 of NSR permit issued 4/17/80 (as amended 6/19/2000 and 1/6/2005))

8. Visible emissions from the Bigelow wood/coal-fired boiler (B-1) exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-80 and 9 VAC 5-80-110 K)

9. Emission monitoring, record keeping and reporting not otherwise required by this permit shall consist of the following operating data:

   a. Consumption of wood and coal fuel, calculated monthly as the sum of each consecutive 12 month period.
   b. Annual hours of operation of the Bigelow boiler, the sulfur content of the coal, and annual emissions calculations for the purpose of compliance certification with the terms of this permit, including hourly and annual emissions limitations. Hourly emissions shall be calculated by dividing the annual emissions calculated monthly as the sum of each consecutive 12 month period, by the annual hours of operation appropriate for the same period.
   c. The DEQ approved, pollutant-specific emission factors and the equations used to determine compliance with condition 7. This shall also include the heat content of the wood used as fuel.

   The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years. (Retention of the foregoing records for a period of ten (10) years may be necessary to the permittee for the purpose of emissions netting, banking, trading and offsets.)

   (9 VAC 5-50-20, and 9 VAC 5-80-110 K)

10. The permittee shall monitor, operate, calibrate and maintain the multicyclone controlling the Bigelow boiler according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Monitor multicyclone pressure drop readings daily. Record results daily.	Observe deviation from normal pressure drop.	Pressure drop from instantaneous observation of Magnahelic gauge or equivalent is no more than 10% below established normal range.
External cyclone inspections, when pressure drop is outside the indicator range. Internal cyclone and ductwork inspection as required to alleviate any flow problems.	Inspections by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	As noted above.

11. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9 VAC 5-80-490 E and 40 CFR 64.6 (c))

12. At all times, the permitttee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9 VAC 5-80-490 E and 40 CFR 64.7 (b))

13. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Bigelow boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9 VAC 5-80-490 E and 40 CFR 64.7 (c))

14. Upon detecting an excursion or exceedance, the permittee shall restore operation of the Bigelow boiler (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

15. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

16. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-490 E and 40 CFR 64.7(e))

17. If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Bigelow boiler for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;
    b. Process operation changes;
    c. Appropriate improvements to control methods;
    d. Other steps appropriate to correct control performance; and
    e. More frequent or improved monitoring.

    (9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

18. As part of the periodic monitoring requirement set forth in 9 VAC 5-80-110 E of State Regulations, an emission test shall be conducted on the Bigelow boiler exhaust for particulate matter to determine compliance with the limits contained in Condition 7, if actual heat input exceeds 50 percent of the 39,200,000 Btu/hr capacity rating. Results shall also serve as a wood-firing emission factor for calculations in Condition 9 above. The test shall be required once per five year permit term and within 120 days of the exceedance noted above. Source emission tests shall be conducted and data reported in accordance with the Source Test Report Format attached to this permit, 9 VAC 5-50-30 of State Regulations, and the test methods and procedures contained in each applicable section or Subpart listed in 9 VAC 5-50-410 of State Regulations. The details of the source emission tests are to be arranged with the Director, Southwest Regional Office. Two (2) copies of the test results shall be submitted to the Southwest Regional Office within 60 days after test completion.
    (9 VAC 5-80-110 K)

19. Emissions from the operation of the Wickes distillate oil-fired boiler (B-2) shall not exceed the limits specified below:

Particulate Matter	0.2 lbs/hr	0.6 tons/yr
Sulfur Dioxide	8.8 lbs/hr	21.5 tons/yr
Nitrogen Oxides (as NO_2)	2.5 lbs/hr	6.0 tons/yr
Carbon Monoxide	0.6 lbs/hr	1.5 tons/yr

    (9 VAC 5-50-260 and 9 VAC 5-50-180 and condition 14 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

20. Visible emissions from the distillate oil-fired boiler (B-2) exhaust shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
    (9 VAC 5-170-160, 9 VAC 5-50-20, and 9 VAC 5-80-110 K and condition 15 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005)).

21. Emission monitoring, recordkeeping and reporting not otherwise required by this permit shall consist of the following fuel consumption and operating data:

    a. Amount of distillate oil combusted in the Wickes oil-fired boiler on a daily basis. Fuel consumption is calculated as the sum of each consecutive 12 month period;
    b. All fuel supplier certifications;
    c. Annual hours of operation of the Wickes boiler, and annual emissions calculations for the purpose of compliance certification with the terms of this permit, including hourly and annual emissions limitations. Hourly emissions shall be calculated by dividing the annual emissions calculated monthly as the sum of each consecutive 12 month period, by the annual hours of operation appropriate for the same period; and
    d. The DEQ approved, pollutant-specific emission factors and the equations used to determine compliance with condition 19.

    The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years. (Retention of the foregoing records for a period of ten (10) years may be necessary to the permittee for the purpose of emissions netting, banking, trading and offsets.)
    (9 VAC 5-50-50 and 9 VAC 5-80-110 F and condition 25 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

22. The maximum sulfur content of the distillate oil to be burned in the Wickes boiler shall not exceed 0.5 percent by weight per shipment. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier

certification shall include the following:

a. The name of the fuel supplier;
b. The date on which the oil was received;
c. The volume of distillate oil delivered in the shipment;
d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2; and
e. An indication that the sulfur content of the distillate oil does not exceed 0.5 percent by weight.

(9 VAC 5-170-160, 9 VAC 5-50-410, 9 VAC 5-80-110, 40 CFR 60.48c(f)(1), 40 CFR 60.42c(h)(1) and condition 16 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

23. The permittee shall submit fuel quality reports to the Director, Southwest Regional Office within 30 days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter the reports shall include:

    a. The dates included in the calendar quarter;
    b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition 22 for each shipment of distillate oil; and
    c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

    (9 VAC 5-170-160, 9 VAC 5-50-50 and 9 VAC 5-80-110, 40 CFR 60.48c(e)(11) and condition 26 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

Woodworking Conditions

24. Particulate emissions from the woodworking equipment shall be controlled by fabric filter baghouses. The baghouses shall be provided with adequate access for inspection and those that exhaust directly to the atmosphere shall be equipped with a device to continuously measure the differential pressure drop across the filter. The device shall be installed in an accessible location and shall be maintained by the permittee in proper working order and checked weekly, with readings noted in a log.
    (9 VAC 5-80-10 H, 9 VAC 5-50-260, 9 VAC 5-40-2270 A, 9 VAC 5-80-110 K and 9 VAC 5-80-110 C and condition 22 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

25. All subsequent transfer of the collected material from the woodworking equipment shall be controlled by a baghouse or completely enclosed transfer system.
    (9 VAC 5-170-160 and 9 VAC 5-80-110 C and condition 23 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

26. A visible emissions check shall be performed on all baghouse exhausts except for Df-1, Df-2 and Df-3, for compliance with limits on visible emissions as specified in Conditions 28 and 29 below. Visible checks on all baghouse exhausts shall be conducted at least once daily during periods of normal facility operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these daily observations, or at any other time, visible emissions evaluations (VEEs) in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If the six-minute average opacity exceeds 20%, or 5% for baghouses Df-7 and Df-8, or 10% for fugitives; the Method 9 evaluation shall be immediately continued for a total evaluation time of 18 minutes, or procedures to correct the visible emission condition shall be taken immediately. The corrective action shall be followed by a six minute VEE in accordance with Method 9 to confirm compliance or 18 minutes if the opacity continues to be greater than the applicable limit. A record of each visible emissions observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. If excess emissions are expected for more than one hour, DEQ malfunction procedures shall be implemented.
    (9 VAC 5-40-20, 9 VAC 5-50-20, and 9 VAC 5-80-110 K)

27. Emissions from the operation of the woodworking equipment through exhausts from baghouses Df-1 through Df-6, Df-7 and Df-8 shall not exceed the limits specified below:

Particulate Matter	0.05 gr/dscf

    Compliance with these limits shall be determined as stated in Conditions 28 and 29, or as demonstrated by performance test.
    (9 VAC 5-40-2270 B and 9 VAC 5-80-110 B)

28. Visible emissions from the operation of the woodworking equipment through exhausts from baghouses Df-4 through Df-6 shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A), except for one six-minute period in any hour of not more than 60% opacity.
    (9 VAC 5-40-2280 and 9 VAC 5-80-110 K)

29. Visible emissions from the operation of the CNC routers through exhausts from baghouses Df-7 and Df-8 shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies to any baghouse controlling the transfer of any collected material from this equipment. This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-170-160, 9 VAC 5-50-20, 9 VAC 5-50-260 and 9 VAC 5-80-110 K and condition 21 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

30. The permittee shall monitor, operate, calibrate and maintain baghouses Df-4, Df-5, Df-6, Df-7, and Df-8 controlling woodworking operations according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
Daily visible emissions checks per condition 26, with results recorded daily.	Check for presence of visible emissions.	Instantaneous observation of visible emission.
Method 9 visible emissions evaluations per condition 26, when triggered by observation of visible emissions.	Conduct visible emissions evaluation in accordance with 40 CFR 60, Appendix A, Method 9. Performed by certified observer.	Opacity is less than or equal to 20% for Df-4, Df-5, and Df-6. Opacity is less than or equal to 5% for Df-7 and Df-8.
Weekly external baghouse inspections with weekly pressure drop recordings.	External baghouse inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Indicator range consists of pressure drops above 1" water column and below 6" water column.
Annual internal baghouse inspections or when indicated by pressure drop.	Internal baghouse inspection by a qualified employee with at least one year of experience in maintenance of mechanical equipment.	Air flow restrictions affecting proper operation of baghouse.

31. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))

32. At all times, the permitttee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equiipment.
(9 VAC 5-80-490 E and 40 CFR 64.7 (b))

33. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the baghouses are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490 E and 40 CFR 64.7 (c))

34. Upon detecting an excursion or exceedance, the permittee shall restore operation of the baghouse to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

35. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and

    records, and inspection of the control device, associated capture system, and the process.
    (9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

36. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary

monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-490 E and 40 CFR 64.7(e))

37. If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the baghouse for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;
    b. Process operation changes;
    c. Appropriate improvements to control methods;
    d. Other steps appropriate to correct control performance; and
    e. More frequent or improved monitoring.

    (9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

Wood Drying (Kilns) Conditions

38. A visible emissions check shall be performed on all wood drying kiln operations, for compliance with limits on visible emissions as specified in condition 39 below. Visible checks shall be conducted at least monthly during periods of normal facility operation for a sufficient time interval, for not less than two months, to determine if there are any visible emissions. Checks may be discontinued if none are observed. If visible emissions are observed during these observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted on those units with visilble emissions. The VEE shall be conducted for a minimum of six (6) minutes. If the six-minute average opacity exceeds 20%, the VEE shall be immediately continued for a total evaluation time of 18 minutes or procedures to correct the visible emission condition shall be taken immediately. The corrective action shall be followed by a six minute VEE in accordance with Method 9 to confirm compliance or 18 minutes if the opacity continues to be greater than 20%. A record of each visible emissions observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. If excess emissions are expected for more than one hour, DEQ malfunction procedures shall be implemented.
    (9 VAC 5-40-20 and 9 VAC 5-80-110 K)

39. Visible emissions from the wood drying equipment shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
    (9 VAC 5-40-80 and 9 VAC 5-80-110 K)

Furniture Finishing Conditions

40. The permittee shall maintain records of all emission data and operating parameters, including annual material throughput for the furniture finishing operations, necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to records of malfunctions of equipment which would cause a violation of any part of this permit. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (Retention of the foregoing records for a period of ten (10) years may be necessary to the permittee for the purpose of emissions netting, banking, trading and offsets.)
    (9 VAC 5-50-50 and 9 VAC 5-80-110 F)

41. The total VOC emissions from the sap/equalizer stains, general stains, wipe stains, shade stains, spatter stains, and spray pads for the spray booths shall not exceed 129.72 tons per year, calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-80-110 and condition 5 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

42. The total VOC emissions from sealer from the spray booths shall not exceed 60.19 tons per year, calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-80-110 and condition 6 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

43. The total VOC emissions from lacquer from the spray booths shall not exceed 104.04 tons per year, calculated monthly as the sum of each consecutive 12 month period.
    (9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-80-110 and condition 7 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

44. The total VOC emissions from laquer thinner from the spray booths shall not exceed 35.53 tons per year, calculated monthly as the sum of each consecutive 12 month period. Lacquer thinner shall not contain hazardous air pollutants.
(9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-80-110 and condition 8 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

45. Annual VOC emissions of water base ink, fill and stains used at the vacuum coater, reverse roll coater, and printer shall not exceed 0.17 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-170-160, 9 VAC 5-80-1180, 9 VAC 5-80-110 and condition 9 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

46. Emissions from the operation of the furniture finishing operations shall not exceed the limits specified below:

Particulate Matter/PM-10	25.2 lb/hr	19.5 tons/yr
Volatile Organic Compounds	449.7 lb/hr	329.7 tons/yr

Compliance with these limits shall be determined by material balance as stated in conditions 41 through 45, and conditions 47 and 49 of this permit.
(9 VAC 5-50-260, 9 VAC 5-60-300, 9 VAC 5-80-110 B and condition 10 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

47. Visible emissions from the dry filter back spray booth exhausts shall not exceed five (5) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-170-160, 9 VAC 5-50-20, 9 VAC 5-80-110 K and condition 11 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

48. Particulate emissions from the spray booths shall be controlled by filters and airless or high volume low pressure (hvlp) equipment to control overspray. The filters shall be provided with adequate access for inspection. Volatile organic compound emissions from the spray booths shall be minimized by the use of airless spray nozzles, or hvlp spray nozzles.
(9 VAC 5-80-10 H, 9 VAC 5-170-160, 9 VAC 5-50-260 and conditions 3 and 4 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

49. Emission monitoring, record keeping and reporting not otherwise required by this permit shall consist of the following operating data:

    a. A monthly and annual material balance including the throughput and emissions of particulate matter and volatile organic compounds for finishing operations. Hourly emissions shall be calculated by dividing the total daily throughput by the corresponding hours of booth operation. Annual throughput and emissions shall be calculated monthly as the sum of each consecutive 12 month period.
    b. The number of hours of operation of the dry filter back spray booths, calculated daily.
    c. Annual VOC emissions of sap/equalizer stains, stains, wipe stains, shade stains, sealer, spray pad, lacquer, spatter, thinner, water base ink, water base fill and water base stains, calculated daily. The permittee shall retain MSDS records to comply with VOC emission limits as stated in Conditions 41 through 45 of this permit.

    The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years. (Retention of the foregoing records for a period of ten (10) years may be necessary to the permittee for the purpose of emissions netting, banking, trading and offsets.)

    (9 VAC 5-50-50, 9 VAC 5-80-110 F and condition 25 of NSR permit issued 3/22/99 (as amended 6/19/2000 and 1/6/2005))

Furniture Gluing Conditions

50. Emissions from the operation of the gluing operations shall not exceed the limits specified below:

Particulate Matter	11.7 lb/hr
PM-10	11.7 lb/hr

(9 VAC 5-40-260 and 9 VAC 5-80-110 B)

51. Emission monitoring, record keeping and reporting not otherwise required by this permit shall consist of the following operating data:

    The annual throughput of wood in square feet through the glue room veneer press, calculated monthly as the sum of each consecutive 12 month period. Annual hours of operation of the press and calculation of the average hourly throughput for the same period.

The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years. (Retention of the foregoing records for a period of ten (10) years may be necessary to the permittee for the purpose of emissions netting, banking, trading and offsets.)
(9 VAC 5-50-50 and 9 VAC 5-80-110 F)

MACT Conditions

52. Except as specified in this permit, the facility is to be operated in compliance with Federal requirements under 40 CFR 63, Subpart JJ.
(9 VAC 5-170-160, 40 CFR 63.800 and 40 CFR 63 Subpart A)

53. Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits;

    a. For finishing operations use any of the following methods;

        i. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;

        ii. Use compliant finishing materials that meet the following specifications:

            (1) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;

            (2) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;

            (3) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (5) of this sub-section;

            (4) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;

            (5) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;

        iii. Use any combination of averaging, compliant coatings, and control device such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;

    b. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;

    c. For contact adhesive operations use the following methods;

        i. Compliant contact adhesives shall be used based on the following criteria;

            (1) For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;

            (2) For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;

            (3) For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied.

    (9 VAC 5-170-160 and 40 CFR 63.802)

54. Initial compliance with the VHAP emissions limits shall be determined as follows:
(See Conditions 60 and 61 for content and timing of report submissions and signature requirements)

    a. For finishing operations when compliant finishing materials are being used to show initial compliance, the permittee shall submit an initial compliance status report stating that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition 53, are being used by the facility.

    b. For finishing operations when compliant finishing materials are being used to show initial compliance and the finishing materials are being applied using continuous coaters the permittee shall:

        i. Submit an initial compliance status report stating that compliant finishing materials, as determined by the VHAP content

of the finishing material in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or

ii. Submit an initial compliance status report stating that compliant finishing materials, as determined by the VHAP content of the finishing material in the reservoir, are being used; the viscosity of the finishing material in the reservoir is being monitored; and compliant thinners are being used. The permittee shall also submit data that demonstrate that viscosity is an appropriate parameter for demonstrating compliance.

c. For contact adhesive operations when compliant adhesives are being used to show initial compliance the permittee shall submit an initial compliance status report stating that compliant adhesives as stated in Condition 53 are being used.

d. For strippable spray booth coatings the permittee shall submit an initial compliance status report stating that compliant strippable spray booth coatings as stated in Condition 53 are being used by the affected source.

e. For work practice standards, in Condition 58, the permittee shall submit an initial compliance status report stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

(9 VAC 5-170-160 and 40 CFR 63.804.(f) & 40 CFR 63.804 (a)-(e))

55. Continuous compliance with the VHAP emissions limits shall be determined as follows:
(See Conditions 60 and 61 for content and timing of report submissions and signature requirements)

a. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition 54, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

b. For finishing operations when compliant coatings are being used to show continuous compliance and the coatings are being applied using continuous coaters the permittee shall demonstrate continuous compliance by either of the following:

i. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant thinners, and submit a compliance certification with the semiannual report which states that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

ii. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintain records of solvent additions, and submit a compliance certification with the semiannual report which states that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period. The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.

c. For contact adhesive operations when compliant adhesives are being used to show continuous compliance the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.

d. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.

e. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time

that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition 58.a.)

(9 VAC 5-170-160 and 40 CFR 63.804.(g) & 40 CFR 63.8)

56. All submittals shall be sent to the Southwest Regional Office and to EPA Region III at the following address:

    Clean Air Act Title V Compliance Certification (3AP00)
    U.S. Environmental Protection Agency, Region III
    1650 Arch Street
    Philadelphia, PA 19103-2029

    (9 VAC 5-170-160 and 40 CFR 63.13)

57. The permittee shall meet the following operation and maintenance requirements:

    a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

    b. Malfunctions shall be corrected as soon as practicable after their occurrence.

    c. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

    d. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

    (9 VAC 5-170-160 and 40 CFR 63.6(e))

58. The permittee shall develop and implement the following work practice standards:

    a. Work practice implementation plan - The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions b. through l. that follow. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

    b. Operator training course - The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

        i. A list of all current personnel by name and job description that are required to be trained;

        ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;

        iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and

        iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

    c. Inspection and maintenance plan - The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

        i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings,

adhesives, or organic HAP solvents;

ii. An inspection schedule;

iii. Methods for documenting the date and results of each inspection and any repairs that were made;

iv. The time frame between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:

(1 A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and

(2 Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.

d. Cleaning and washoff solvent accounting system - The permittee shall develop an organic HAP solvent accounting form to record:

i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;

ii. The number of pieces washed off, and the reason for the washoff; and

iii. The quantity of spent organic solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

e. Chemical composition of cleaning and washoff solvents - The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ (see attached), in concentrations subject to MSDS reporting as required by OSHA.

f. Spray booth cleaning - The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

g. Storage requirements - The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

h. Application equipment requirements - The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
i. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

ii. For touchup and repair under the following conditions:

(1) The touchup and repair occurs after completion of the finishing operation; or

(2) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.

iii. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;

iv. When emissions from the finishing application station are directed to a control device;

v. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or

vi. The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic infeasiblity by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasibility:

(1) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(2) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

i. Line cleaning - The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

k. Washoff operations - The permittee shall control emissions from washoff operations by:

i. Using normally closed tanks for washoff; and

ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

l. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

i. Identifies VHAP from the list presented in Table 5 of Subpart JJ (see attached) that are being used in finishing operations;

ii. Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by §63.803 (l)(2). For VHAPs that do not have a baseline, one will be established according to Condition 58.l.vi. below.

iii. Tracks the annual usage of each VHAP identified that is present in amounts subject to MSDS reporting as required by OSHA.

iv. If the annual usage of the VHAP identified exceeds its baseline level, then the permittee of the facility shall provide a written notification to the Southwest Regional Office and/or the Administrator that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

(1 The exceedance is no more than 15.0 percent above the baseline level;
(2 Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP ;
(3 The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
(4 The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.

v. If none of the explanations listed in Condition 58.l.iv. above are the reason for the increase, the permittee shall confer with the Southwest Regional Office and/or the Administrator to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Southwest Regional Office and/or the Administrator and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

vi. If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potental concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then the permittee shall provide an explanation to the Southwest Regional Office and/or the Administrator that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in Condition 58.l.iv. above, the affected source shall follow the procedures established in Condition 58.l.v. above.

(9 VAC 5-170-160 and 40 CFR 63.803(a)-(l))

59. The permittee shall maintain records of the following:

a. For emission limit purposes the permittee shall maintain the following:

i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating

subject to the emission limits in Subpart JJ,

ii. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Subpart JJ; and

iii. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Subpart JJ.

b. Following the continuous coating operations, where viscosity is being used to determine compliance, the permittee shall maintain the records required by Condition 59.a. above as well as the following:

i. Solvent and coating additions to the continuous coater reservoir;

ii. Viscosity measurements; and

iii. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.

c. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

i. Records demonstrating that the operator training program required by Condition 58.b. is in place;

ii. Records collected in accordance with the inspection and maintenance plan required by Condition 58.c.;

iii. Records associated with the cleaning solvent accounting system required by Condition 58.d.;

iv. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition 58.h.;

v. Records associated with the formulation assessment plan required by Condition 58.l.; and

vi. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

d. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.

e. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.

f. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(9 VAC 5-170-160 and 40 CFR 63.806 & 63.10(b)(1))

60. Each time a notification of compliance status is required, the permittee shall submit to the appropriate permitting authority (Administrator and the Southwest Regional Office) notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification shall list:

a. The methods that were used to determine compliance;

b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;

e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);

f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

g. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.

(9 VAC 5-170-160 and 40 CFR 63.9(h))

61. Reporting required by this permit shall consist of the following:

a. The permittee when demonstrating initial compliance shall submit the compliance status report required by §63.9(h) and Condition 60 no later than 60 days after the compliance date. The report shall include the information required by Condition 54.

b. The permittee when demonstrating continuous compliance shall submit a report covering the previous 6 months of wood furniture manufacturing operations:

i. The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

ii. Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

iii. The semiannual reports shall include the information required by Condition 55, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.

iv. The frequency of the reports required by Condition 61.b. above shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

c. The permittee, when required to provide a written notification by Condition 58.l.iv. for exceedance of a baseline level §63.803(l)(4), shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

(9 VAC 5-170-160 and 40 CFR 63.807 & 63.10(d))

Other Conditions

62. Unless otherwise specified in this permit, visible emissions from any emission unit at this facility shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-40-80, 9 VAC 5-50-80 and 9 VAC 5-80-110 K)

63. A visible emissions check shall be performed on the Bigelow boiler stack and all spray booth exhausts, for compliance with limits on visible emissions as specified in conditions 8 and 47 above. Visible checks shall be conducted at least weekly for the boiler and once daily for the spray booths during periods of normal facility operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these daily observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60 Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If the six-minute average opacity exceeds 20%, or 5% for the spray booths, the VEE shall be immediately continued for a total evaluation time of 18 minutes or procedures to correct the visible emission condition shall be taken immediately. The corrective action shall be followed by a six minute VEE in accordance with Method 9 to confirm compliance or 18 minutes if the opacity continues to be greater than the applicable limit. A record of each visible emissions observation shall be maintained, including any data required by 40 CFR 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.
(9 VAC 5-50-20 and 9 VAC 5-80-110 K)

64. Upon request of the Department, the permittee shall conduct emission tests in accordance with procedures approved by the Department and provide, or cause to be provided, emission testing facilities as follows:

- Sampling ports adequate for test methods applicable to such source.
- Safe sampling platforms.
- Safe access to sampling platforms.
- Utilities for sampling and testing equipment.

(9 VAC 5-50-30 F and 9 VAC 5-40-30 F)

General Conditions

65. At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-40-20 E and 9 VAC 5-50-20 E)

66. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. An applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E and 9 VAC 5-80-110 M)

67. Any application form, report, compliance certification, or other document required to be submitted to the DEQ shall be signed by a responsible official.
(9 VAC 5-80-80 G and 9 VAC 5-80-110 K)

68. This permit shall become invalid five years from the date of issuance. The date of expiration of this permit is June , 2010. The permittee shall submit an application for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

69. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G and 9 VAC 5-80-260 A)

70. The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-110 G)

71. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G)

72. The permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

    a. This permit will be reopened and revised by the DEQ prior to expiration due to the following causes:

        i. If additional applicable federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire.

        ii. If the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

        iii. If the Administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

        iv. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date of this permit.

    b. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as

practicable.

c. Reopenings shall not be initiated before a notice of such intent is provided to the source by the Board at least 30 days in advance of the date that the permit is to be reopened, except that the Board may provide a shorter time period in the case of an emergency.

d. If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit pursuant to 9 VAC 5-80-240 A, the administrator shall notify the Board and the permittee of such finding in writing. Following such notification the procedures as listed in 9 VAC 5-80-240 D shall be followed.

e. A permit may be revoked or terminated prior to its expiration date if the owner does any of the following:

i. Knowingly makes material misstatements in the permit application or any amendments thereto.

ii. Violates, fails, neglects or refuses to comply with (i) the terms or conditions of the permit, (ii) any applicable requirements, or (iii) the applicable provisions of Rule 8-5.

The board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination stated above for any other violations of the regulations.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260)

73. The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G)

74. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G)

75. The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

76. No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.
(9 VAC 5-80-110 I)

77. Upon presentation of credentials and other documents as may be required by law, the owner shall allow the Board to perform the following:

a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K and 9 VAC 5-80-260 E)

78. The permittee shall comply with the compliance schedule as follows:

a. For applicable requirements with which the source is in compliance the permittee will continue to comply with such requirements.

b. For applicable requirements that will become effective during the permit term the permittee will meet such requirements on a

timely basis.

(9 VAC 5-80-110 K and 9 VAC 5-80-90 I)

79. The permittee shall submit a certification of compliance with permit terms and conditions no later than March 1 of each calendar year.

    a. The compliance certification shall include the following:

        i. The permit term or condition that is the basis of the certification;

        ii. The current compliance status;

        iii. Whether compliance was continuous or intermittent;

        iv. The methods used for determining compliance, currently and over the reporting period; and

        v. Such other facts as the board may require to determine the compliance status of the source.

    b. All compliance certifications shall be submitted to the DEQ and to the EPA administrator as noted in condition 56.

    c. Such additional requirements as may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act.

    (9 VAC 5-80-110 K)

80. The permit shield provides that:

    a. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements in effect as of the date of permit issuance and as specifically identified in the permit. The permit shield shall cover only the applicable requirements that are covered by terms and conditions of the permit, and

    b. Nothing in 9 VAC 5-80-140 or in this permit shall alter or affect the following:

        i. The provisions of § 303 of the federal Clean Air Act (emergency orders), including the authority of the administrator under that section.

        ii. The liability of an owner for any violation of applicable requirements prior to or at the time of permit issuance.

        iii. The ability to obtain information from a source by the (1) administrator pursuant to § 114 of the federal Clean Air Act (inspections, monitoring, and entry); (2) board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law; or (3) department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.

    (9 VAC 5-80-140)

81. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

    In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

    In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
    (9 VAC 5-80-160)

82. Changes to emissions units that pertain to applicable federal requirements at a source with a permit issued shall be made as specified under 9 VAC 5-80-190 B through D and 9 VAC 5-80-200 through 9 VAC 5-80-240. Changes to emissions units that pertain to applicable state requirements at a source with a permit issued shall be made as specified under 9 VAC 5-80-190 E.
    (9 VAC 5-80-190 A)

83. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph a. of this condition are met.:

    a. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

i. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
ii. The permitted facility was at the time being properly operated.
iii. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
iv. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b. to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

b. In any enforcement proceeding, the permittee seeking to establish the occcurrence of a malfunction shall have the burden of proof.

c. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

84. The permittee shall notify the Director, Southwest Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventive measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report required by condition 89.b. or in the certification of compliance with permit terms and conditions pursuant to condition 79 of this permit.
(9 VAC 5-80-110 F.2)

85. In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.
(9 VAC 5-20-180 C)

86. All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

87. If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

88. If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

89. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

i. Exceedance of emissions limitations or operational restrictions;

ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or

operational restrictions; or,

iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

90. Within five days after receipt of the issued permit, the applicant shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

Emission Unit ID	Pollutant Emitted	Emissions Limit / Work Practice Standard	Regulations	Control Equipment or Method Conditions	Testing Requirement Conditions	Monitoring Requirement Conditions	Record-keeping Requirement Conditions	Reporting Requirement Conditions
Fuel Burning Equipment								
B1-A B1-B B1-C	PM SO_2 NO_2 VOC Visible Emission	12.7 lbs/hr 53.0 tons/yr 34.2 lbs/hr 143.6 tons/yr 22.5 lbs/hr 94.5 tons/yr 1.5 lbs/hr 6.3 tons/yr 20% opacity	NSR permit issued 4/17/80 (amended 6/19/2000 & 1/6/05), 9 VAC 5-50-20 and 9 VAC 5-80-110 K of State Regs. 40 CFR 64.7 - 40 CFR 64.9 (CAM)	Barron Industries multicyclone (bm-1) Conditions 2 and 3	Condition 18	Conditions 9, 10 -17, and 63	Conditions 9 and 63	Condition 79
B2	PM SO_2 NO_2 CO Visible Emission	0.2 lbs/hr 0.6 tons/yr 8.8 lbs/hr 21.5 tons/yr 2.5 lbs/hr 6.0 tons/yr 0.6 lbs/hr 1.5 tons/yr 10% opacity Consumption of distillate fuel oil Limited to 600,000 gallons per year And 0.5 percent sulfur by weight.	NSR permit issued 3/22/99 (amended 6/19/2000 & 1/6/2005), 40 CFR 60, Subpart Dc, 9 VAC 5-80-10, 9 VAC-170-160, 9 VAC 5-50-20, 9 VAC 5-50-50, 9 VAC 5-50-410, and 9 VAC 5-80-110 A, B, F and K of State Regs.			Conditions 6, 21 and 22	Conditions 6, 21 and 22	Conditions 23 and 79
Woodworking Operations								
WO (bh-1) (bh-2) (bh-3)	PM Visible Emission	0.05 gr/dscf (These baghouses vent internally)	9 VAC 5-40-20, 9 VAC 5-40-2270 B, 9 VAC 5-40-2280 and 9 VAC 5-80-110 B, C and K of State Regs.	Moldow baghouses (df-1, df-2, df-3) Conditions 2 And 24			Condition 24	Condition 79
WO (bh-4)	PM Visible	0.05 gr/dscf 20% opacity	9 VAC 5-40-20, 9 VAC 5-40-2270 B, 9 VAC	Carter-Day baghouses (df-4 and		Conditions 26 and 30 - 37	Conditions 24 and 26 and 30	Conditions 36 and 79

Emission Unit ID	Pollutant Emitted	Emissions Limit / Work Practice Standard	Regulations	Control Equipment or Method Conditions	Testing Requirement Conditions	Monitoring Requirement Conditions	Record-keeping Requirement Conditions	Reporting Requirement Conditions
(bh-5)	Emission		5-40-2280, 40 CFR 64.7 - 40 CFR 64.9 (CAM), and 9 VAC 5-80-110 B, C, F and K of State Regs.	Df-5) Conditions 2 And 24			- 37	
WO (bh-6)	PM Visible Emission	0.05 gr/dscf 20% opacity	9 VAC 5-40-2270 B, 9 VAC 5-40-2280, 40 CFR 64.7 - 40 CFR 64.9 (CAM), and 9 VAC 5-80-110 B, C, F and K of State Regs.	Torit-Day baghouse (df-6) Conditions 2 and 24		Conditions 26 and 30 -37	Conditions 24 and 26 and 30 - 37	Conditions 36 and 79
WO (bh-7)	PM Visible Emission	0.05 gr/dscf 5% opacity	NSR permit issued 3/22/99 (amended 6/19/2000 & 1/6/2005), 9 VAC 5-50-20, 9 VAC 5-50-50, 9 VAC 5-50-260, 9 VAC 5-170-160, 9 VAC 5-80-10 H and 9 VAC 5-80-110 B, C, F and K of State Regs.	Donaldson baghouse (df-7) Conditions 2 and 24		Conditions 26 and 30 - 37	Conditions 24 and 26 and 30 - 37	Conditions 36 and 79
WO (bh-8)	Visible Emission	5% opacity 0.05 gr/dscf	NSR permit issued 3/22/99 (amended 6/19/2000 & 1/6/2005), 9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-40-2270 B, 9 VAC 5-50-10 D, 9 VAC 5-80-10 H and 9 VAC 5-80-110 B, C, F and K of State Regs.	Torit 72RF10 baghouse Conditions 2 And 24		Condition 27	Conditions 24 and 27	Condition 79

Emission Unit ID	Pollutant Emitted	Emissions Limit / Work Practice Standard	Regulations	Control Equipment or Method Conditions	Testing Requirement Conditions	Monitoring Requirement Conditions	Record-keeping Requirement Conditions	Reporting Requirement Conditions
Furniture Finishing Operations								
FR (sb-1thru sb-12) (ov-1thru ov-5) (ft-1)	PM PM-10 VOC Visible Emission	25.2 lb/hr 19.5 tons/yr 25.2 lb/hr 19.5 tons/yr 449.7 lb/hr 329.7 tons/yr 5% opacity Coating throughputs not to exceed The following, calculated monthly as the sum of each consecutive 12 month period: All stains and spray pads - 129.72 tons of VOC emissions/yr Sealer - 60.19 tons of VOC emissions/yr Lacquer - 104.04 tons of VOC emissions/yr Lacquer thinner - 35.53 tons of VOC emissions/yr Water base ink, fill and stains - 0.17 tons of VOC emissions/yr Subpart JJ Standards: Use compliant coatings and contact adhesives with no more than 1.0 lb VHAP/lb solids. Thinner must not contain more than 10% HAPs.	NSR permit issued 3/22/99 (amended 6/19/2000 & 1/6/2005), 40 CFR 63 Subpart JJ, 9 VAC 5-40-50, 9 VAC 5-40-80, 9 VAC 5-40-260, and 9 VAC 5-80-110 B, F and K of State Regs.	Filters for sb-1 thru sb-12 Condition 2		Conditions 40, 49 and 63	Conditions 40, 49, 59, and 63	Conditions 60, 61 and 79
Wood Drying (Kiln) Operations								
LD (dk-1) (dk-2) (dk-3) (dk-4)	Visible Emission	20% opacity	9 VAC 5-40-20, 9 VAC 5-40-80 and 9 VAC 5-80-110 K of State Regs.			Condition 38	Condition 38	Condition 79

Emission Unit ID	Pollutant Emitted	Emissions Limit / Work Practice Standard	Regulations	Control Equipment or Method Conditions	Testing Requirement Conditions	Monitoring Requirement Conditions	Record-keeping Requirement Conditions	Reporting Requirement Conditions
Furniture Gluing Operations								
GO	PM		9 VAC 5-40-20, 9 VAC 5-40-80, 9 VAC 5-40-260, and 9 VAC 5-80-110 B and K of State Regs.			Condition 51	Condition 51	Condition 79
Insignificant Equipment or Activities								
DG-1	PM Visible Emission	20% opacity	9 VAC 5-40-80 and 9 VAC 5-40-260					
FP-1	PM Visible Emission	20% opacity	9 VAC 5-40-80, 9 VAC 5-40-260 and 9 VAC 5-40-280 B					

SOURCE TESTING REPORT FORMAT

Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Tester; name, address and report date

Certification

1. Signed by team leader / certified observer (include certification date)

*2. Signed by reviewer

Introduction

1. Test purpose
2. Test location, type of process
3. Test dates

*4. Pollutants tested

5. Test methods used
6. Observers' names (industry and agency)
7. Any other important background information

Summary of Results

1. Pollutant emission results / visible emissions summary
2. Input during test vs. rated capacity
3. Allowable emissions

*4. Description of collected samples, to include audits when applicable

5. Discussion of errors, both real and apparent

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Process and control equipment data

* Sampling and Analysis Procedures

1. Sampling port location and dimensioned cross section
2. Sampling point description
3. Sampling train description
4. Brief description of sampling procedures with discussion of deviations from standard methods
5. Brief description of analytical procedures with discussion of deviation from standard methods

Appendix

*1. Process data and emission results example calculations

2. Raw field data

*3. Laboratory reports

4. Raw production data

*5. Calibration procedures and results

6. Project participants and titles
7. Related correspondence
8. Standard procedures

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* Not applicable to visible emission evaluations.

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Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Source: 55 FR 37674, September 12, 1990, unless otherwise noted.

ə 60.40c Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW)(100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, ə60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

ə 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials in ASTM D388-77, "Standard Specification for Classification of Coals by Rank" (incorporated by reference-see ə60.17); coal refuse; and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat, including but not limited to solvent-refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry
basis).

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference-see ə60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO_2) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct-burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under ə60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-86, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference-see ə60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO_2 emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst. Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference-see ə60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO_2 control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

ə 60.42c Standard for sulfur dioxide.

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, the owner the operator of an affected facility that combusts only coal shall neither: (1) cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction); nor (2) cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 90 percent SO_2 reduction requirement specified in this paragraph and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/million Btu) heat input. If coal is fired with coal refuse, the affected facility is subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 90 percent SO_2 reduction requirement specified in paragraph (a) of this section and the emission limit determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO_2 emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 50 percent (0.50) of the potential SO_2 emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 260 ng/J (0.60 lb/million Btu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO_2 reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under this paragraph.

(1) Affected facilities that have a heat input capacity of 22 MW (75 million Btu/hr) or less.

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a Federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area.

(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under ∋60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under ∋60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO_2 in excess of the following:

(1) The percent of potential SO_2 emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel,

(ii) Has a heat input capacity greater than 22 MW (75 million Btu/hr), and

(iii) Has an annual capacity factor for coal greater that 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = [(K_aH_a+K_bH_b+K_cH_c)/H_a+H_b+H_c]$$

where:

E_s is the SO_2 emission limit, expressed in ng/J or lb/million Btu heat input,

K_a is 520 ng/J (1.2 lb/million Btu),

K_b is 260 ng/J (0.60 lb/million Btu),

K_c is 215 ng/J (0.50 lb/million Btu),

H_a is the heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [million Btu]

H_b is the heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (million Btu)

H_c is the heat input from the combustion of oil, in J (million Btu).

(f) Reduction in the potential SO_2 emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO_2 emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under ∋60.48c(f)(1), (2), or (3), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).

(3) Coal-fired facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 million Btu/hr).

(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

ə 60.43c Standard for particulate matter.

(a) On and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.05 lb/million Btu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/million Btu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under ə60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

ə 60.44c Compliance and performance test methods and procedures for sulfur dioxide.

(a) Except as provided in paragraphs (g) and (h) of this section and in ə60.8(b), performance tests required under ə60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in ə60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under ə60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO_2 emission limits under ə60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) and ə60.8, compliance with the percent reduction requirements and SO_2 emission limits under ə60.42c is based on the average percent reduction and the average SO_2 emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO_2 emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average SO_2 emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate E_{ao} when using daily fuel sampling or Method 6B.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E_{ho} ($E_{ho}E$) is used in Equation 19-19 of Method 19 to compute the adjusted E_{ao} ($E_{ao}E$). The $E_{ho}E$ is computed using the following formula:

$$E_{ho}E = [E_{ho} - E_w(1-X_k)]/X_k$$

where:

$E_{ho}E$ is the adjusted E_{ho}, ng/J (lb/million Btu)

E_{ho} is the hourly SO_2 emission rate, ng/J (lb/million Btu)

E_w is the SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = O$.

X_k is the fraction of total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(2) The owner or operator of an affected facility that qualifies under the provisions of ə60.42c(c) or (d) [where percent reduction is not required] does not have to measure the parameters E_w or X_k if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19.

(f) Affected facilities subject to the percent reduction requirements under ə60.42c(a) or (b) shall determine compliance with the SO_2 emission limits under ə60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO_2 emission rate is computed using the following formula:

$$\%P_s = 100(1-\%R_g/100)(1-\%R_f/100)$$

where:

$\%P_s$ is the percent of potential SO_2 emission rate, in percent

$\%R_g$ is the SO_2 removal efficiency of pretreatment as determined by Method 19, in percent

$\%R_f$ is the SO_2 removal efficiency of fuel pretreatment as determined by Method 19, in percent

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the $\%P_s$, an adjusted $\%R_g$ ($\%R_gE$) is computed from $E_{ao}E$ from paragraph (e)(1) of this section and an adjusted average SO_2 inlet rate ($E_{ai}E$) using the following formula:

$$\%R_gE = 100[1.0-E_{ao}E/E_{ai}E]$$

where:

$\%R_gE$ is the adjusted $\%R_g$, in percent

$E_{ao}E$ is the adjusted E_{ao}, ng/J (lb/million Btu)

$E_{ai}E$ is the adjusted average SO_2 inlet rate, ng/J (lb/million Btu)

(ii) To compute $E_{ai}E$, an adjusted hourly SO_2 inlet rate ($E_{hi}E$) is used. The $E_{hi}E$ is computed using the following formula:

$$E_{hi}E = [E_{hi}-E_w(1-X_k)]/X_k$$

where:

$E_{hi}E$ is the adjusted E_{hi}, ng/J (lb/million Btu)

E_{hi} is the hourly SO_2 inlet rate, ng/J (lb/million Btu

E_w is the SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO_2 sampling and analysis procedures in Method 19, ng/J (lb/million Btu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E_w if the owner or operator elects to assume $E_w = O$.

X_k is the fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under ɔ60.42c based on shipment fuel sampling, standards under ɔ60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under ɔ60.46c(d)(2).

(h) For affected facilities subject to ɔ60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification, the certification from the fuel supplier, as described under ɔ60.48c(f)(1), (2), or (3), as applicable.

demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour averaged firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under ə60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ or E_{ho} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

ə 60.45c Compliance and performance test methods and procedures for particulate matter.

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under ə60.43c shall conduct an initial performance test as required under ə60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods.

(i) Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry square cubic meters (dscm) [60 dry square cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(2) Method 3 shall be used for gas analysis when applying Method 5, Method 5B, of Method 17.

(3) Method 5, Method 5B, or Method 17 shall be used to measure the concentration of PM as follows:

(i) Method 5 may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160EC (320EF). The procedures of Sections 2.1 and 2.3 of Method 5B may be used in Method 17 only if Method 17 is used in conjunction with a wet scrubber system. Method 17 shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B may be used in conjunction with a wet scrubber system.

(4) For Method 5 or Method 5B, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 160EC (320EF).

(5) For determination of PM emissions, an oxygen or carbon dioxide measurement shall be obtained simultaneously with each run of Method 5, Method 5B, or Method 17 by traversing the duct at the same sampling location.

(6) For each run using Method 5, Method 5B, or Method 17, the emission rates expressed in ng/J (lb/million Btu) heat input shall be determined using:

(i) The oxygen or carbon dioxide measurements and PM measurements obtained under this section,

(ii) The dry basis F-factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 (Appendix A).

(7) Method 9 (6-minute average of 24 observations) shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under ə60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less that the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

ə 60.46c Emission monitoring for sulfur dioxide

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO_2 emission limits under ə60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO_2 concentrations and either oxygen or carbon dioxide concentrations at the outlet of the SO_2 control device (or the outlet of the steam generating unit if no SO_2 control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under ə60.42c shall measure SO_2 concentrations and either oxygen or carbon dioxide concentrations at both the inlet and outlet of the SO_2 control device.

(b) The 1-hour average SO_2 emission rates measured by a CEM shall be expressed in ng/J or lb/million Btu heat input and shall be used to

calculate the average emission rates under ə60.42c. Each 1-hour average SO_2 emission rate must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods. Hourly SO_2 emission rates are not calculated if the affected facility is operated less

(3) For affected facilities subject to the percent reduction requirements under ə60.42c, the span value of the SO_2 CEMS at the inlet to the SO_2 control device shall be 125 percent of the maximum established hourly potential SO_2 emission rate of the fuel combusted, and the span value of the SO_2 CEMS at the outlet from the SO_2 control device shall be 50 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of ə60.42c, the span value of the SO_2 CEMS at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) shall be 125 percent of the maximum estimated hourly potential SO_2 emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEM at the outlet from the SO_2 control device (or outlet of the steam generating unit if no SO_2 control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emission rate by using Method 6B. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B shall be conducted pursuant to

than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under ə60.13 shall be followed for installation, evaluation, and operation of the CEMS.

paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19. Method 19 provides procedures for converting these measurements into the format to be used in calculating the average SO_2 input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B may be used in lieu of CEMS to measure SO_2 at the inlet or outlet of the SO_2 control system. An initial stratification test is required to verify the adequacy of the Method 6B sampling location. The stratification test shall

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (Appendix B).

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F).

consist of three paired runs of a suitable SO_2 and carbon dioxide measurement train operated at the candidate location and a second similar train operated according to the procedures in ə3.2 and the applicable procedures in section 7 of Performance Specification 2 (Appendix B). Method 6B, Method 6A, or a combination of Methods 6 and 3 or Methods 6C and 3A are suitable measurement techniques. If Method 6B is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to ə60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, as described under ə60.48c(f)(1), (2), or (3), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the

affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator.

ə 60.47c Emission monitoring for particulate matter.

(a) The owner or operator of an affected facility combusting coal, residual oil, or wood that is subject to the opacity standards under ə60.43c shall install, calibrate, maintain, and operate a CEMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All CEMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 (appendix B). The span value of the opacity

(b) The owner or operator of each affected facility subject to the SO_2 emission limits of ə60.42c, or the PM or opacity limits of ə60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS using the applicable performance specifications in appendix B.

(c) The owner or operator of each coal-fired, residual oil-fired, or wood-fired affected facility subject to the opacity limits under ə60.43c(c) shall submit excess emission reports for any calendar quarter for which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test, unless no excess emissions occur during that quarter. The initial semiannual report shall be postmarked by the 30th day of the sixth month following the completion of the initial CEMS shall be between 60 and 80 percent.

ə 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by ə60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under ə60.42c, or ə60.43c.

performance test, or following the date of the previous quarterly report, as applicable. Each subsequent quarterly or semiannual report shall be postmarked by the 30th day following the end of the reporting period.

(d) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under ə60.42c shall submit quarterly reports to the Administrator. The initial quarterly report shall be postmarked by the 30th day of the third month following the completion of the initial performance test. Each subsequently quarterly report shall be postmarked by the 30th day following the end of the reporting period.

(e) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under ə60.43c shall keep records and submit quarterly reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO_2 emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device.The affected facility is subject to the provisions of ə60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(2) Each 30-day average SO_2 emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(4) Identification of any steam generating unit operating days for which SO_2 or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

(5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken

if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

(6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.

(7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.

(8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.

(9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (appendix B).

(10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier; and

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in ə60.41c.

(2) For residual oil:

(i) The name of the oil supplier,

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine

(and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

(h) The owner or operator of each affected facility subject to a Federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under ə60.42c or ə60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(Approved by the Office of Management and Budget under control number 2060-0202)